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na Business Review

Hope in the Heartland

INDIANA UNIVERSITY
School of Business / Division of Research

HOPE IN THE HEARTLAND
A Message from the Dean

On September 24, 1981, the School of Business conducted a colloquy for Indiana business executives on the economic conditions of the state and the Great Lakes region. This event was part of the dedicatory ceremonies for our new classroom/office building in Indianapolis. The following papers present a sample of the discussion and concern expressed at that conference.

Recent economic events have highlighted the changes of the midwestern economy. National publications have given dramatic testimony to the extent of those problems without the balanced appraisal of two added forces:

1. Economic affairs often contain self-correcting counter forces, and
2. Efforts by individuals, firms, institutions, and governments can alter the course of events.

We believe that the trends which are documented in the following pages are subject to reconsideration. The personal attachment of individuals to their homes and communities, the dynamics of the marketplace, and the intervention of governmental agencies can have profound consequences.

The papers offered here are reflective of the commitment to the heartland that constitutes our best hopes.

Schuyler F. Otteson, Dean
School of Business
Indiana University

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Hope in the Heartland

JACK ENGLEDOW

Professor of Marketing, Indiana University, School of Business

The trends and events that we will be discussing here today are regional in scope. They are macro in nature. They involve thousands of organizations, millions of individuals, billions of dollars—and rather long periods of time. And we'll be looking at them primarily from that scope. But I'd also like to take a look at the same phenomenon from a bit more personal approach.

I'm a local boy—as we Hoosiers say, "born and raised here in Indianapolis." Consequently, I have what, I'm sure, is a very provincial—a much more emotional than rational—attachment to the area. You know, I like it here.

My tongue is deeply scarred from a lifetime of trying to be civil to people from other parts of the country who come in here and talk to us about "Indian-no-place", about the world's largest lighted cornfields, and other pleasantries. And yet, you know, I've been interested to note that a surprising number of those people make a deep sacrifice and manage to settle in and spend a lifetime here among the corn shucks with us. I graduated from high school and attended college here in central Indiana. I've found that a very large proportion of my friends and acquaintances from those times have also settled in this part of the country. Many of those people are now at, or near, the top of organizations that are very important in this community. I guess the moral here is that my contemporaries have found that Indiana is a very good place to live a life, to make a living, and to run a store.

During the last couple of years the children of my friends, my children, and the friends of my children have married. We've had some fairly pleasant summers watching brides go up and down the aisle and drinking bubbly.

But at the end of this past summer it dawned on me what was happening to these young people after the wedding. The daughter of a friend joined her husband in the South. He had quit his job here and moved on to what he thought was a better opportunity. The son of a friend graduated from Purdue and took a very fine job with a firm near San Francisco. Another friend's son, who has an MBA from a very respected institution, searched for about

seven months here in this area then found an excellent opportunity in Ft. Worth. The son of another friend moved with his new bride to southern California. In the last two years then, from a very close-knit group of about seven couples that we spend a lot of time with, nine of our children have moved out of the state, six of those to the Sunbelt.

On top of that, two of my very best friends, who are entrepreneurial types, looked around, did not particularly like what they found, and at the age of fifty packed up bags and baggage and moved to southwestern Texas.

Suddenly what the cold statistics have been telling us for a long period of time came to me in a very personal, very important kind of a way. The children, and perhaps even a disproportionate number of the brightest and the best of those children, are leaving. And I think that there's mounting evidence that this generation and the business organizations that they are joining are much less likely than we have been to find this a good place to live a life, to make a living, and to run a store.

This distressing conclusion is another way of looking at the basic reason why we're here. The title of this colloquy is *Hope in the Heartland.* That's a value judgment. It suggests that if the above distressing conclusion is true, it's at the very least reversible. We're assembled here in a brand new building that represents a sizable commitment by this university, and by the schools that inhabit the building, to the future of this area. The positions of responsibility that you hold, and your own personal records in many cases, indicate a similar kind of commitment. It's entirely appropriate that we're here as representatives of the university, of a business school, and of a business community to talk about the future of the heartland.

To set the stage for the discussion for the rest of the day, three of my colleagues, chosen because they are respected commentators from their own areas of the academic world, would like to give you some specific comments with regard to their own areas. Howard G. Schaller, Professor of Business Economics and Public Policy and Executive Associate Dean of the School of Business, would like to give you a summary and an overview of some of the statistics and some of the economic data that had been prepared by our Division of Research. J. Fred Bateman is also a Professor of Business Economics and Public Policy and is chairperson of that department. Fred is a noted business historian and would like to give us some perspective on the history of the Midwest, and also the history of regions that have hit similar kinds of economic problems in their development. Harvey C. Bunke is a Professor of Business Administration in the School of Business and is also the editor of our publication *Business Horizons.* He would like to pinpoint some specifically nettlesome areas in the economy, to talk about some specific problems, and then to pose some very tough questions for us.

Trends in the Heartland

MORTON J. MARCUS

Research Economist, Division of Research, Indiana University, School of Business

POPULATION GROWTH

Actual growth in population for the nation, the Great Lakes states (Ohio, Indiana, Illinois, Wisconsin, and Michigan) and the state of Indiana peaked in the 1950s. Each area grew by fewer persons in the decades ending in 1970 and 1980 than in the booming 1950s.

In the 1950s, Indiana's growth of 728,000 persons was equal to 2.5% of the growth in the national population. In the 1970s, however, Indiana captured only 1.4% of the nation's growth. If the state had kept its 1950s share of population growth, in both the 1960s and the 1970s, there would be an additional 323,000 persons in the state today.

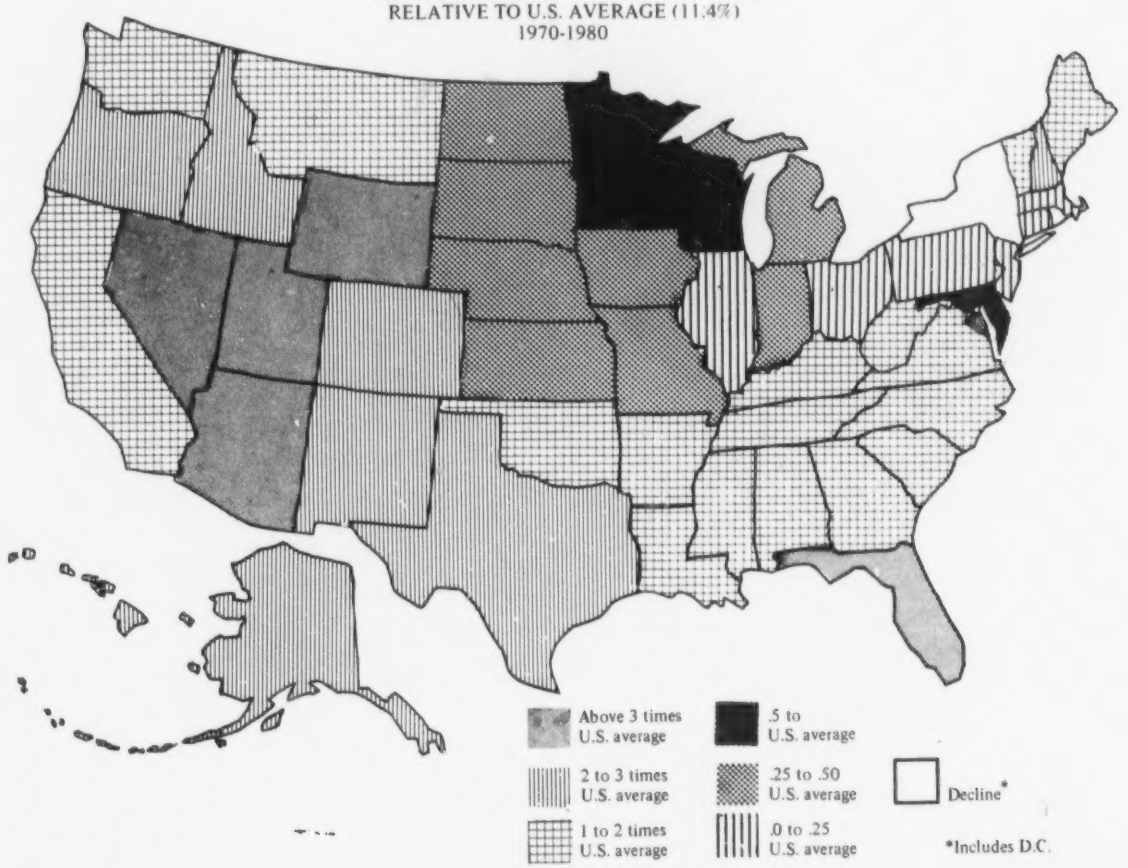
Indiana's growth in population for the 1970s was 296,000 persons, 59.3% slower than the peak decade of the 1950s. The Great Lakes states added 1,415,000 persons, or nearly 76% less than in the 1950s. The national slowdown in population growth was 25.4%.

Figure 1 shows that each state in the Great Lakes area grew in population in the decade of the 1970s, but all grew less rapidly than the national rate of increase, 11.4%. As a group the Great Lakes states grew by 3.5% for the decade with Wisconsin leading at a 6.5% rate. Indiana's growth rate (5.7%) ranked second among Great Lakes states but was only half the national rate of increase.

DIFFERENCES IN POPULATION GROWTH RATES

For every decade of this century, Indiana has had a slower population growth rate than the nation. As shown in Figure 2, the national rate of population growth is set at zero and the difference of Indiana and the Great Lakes states from the national rate of growth is shown. In the decades ending in 1920 and 1930 the Great Lakes exceeded the national rate of growth, while Indiana grew more slowly than the national rate. In the 1940s and 1950s both Indiana and the Great Lakes region grew at roughly the same rate and approximately

Figure 1
PERCENTAGE CHANGE OF POPULATION
RELATIVE TO U.S. AVERAGE (11.4%)
1970-1980


Above 3 times U.S. average
2 to 3 times U.S. average
1 to 2 times U.S. average
.5 to U.S. average
.25 to .50 U.S. average
.0 to .25 U.S. average
Decline*
*Includes D.C.

matched the nation's growth rate. In the decade of the 1960s and 1970s Indiana outperformed its sister states in the region.

PER CAPITA PERSONAL INCOME

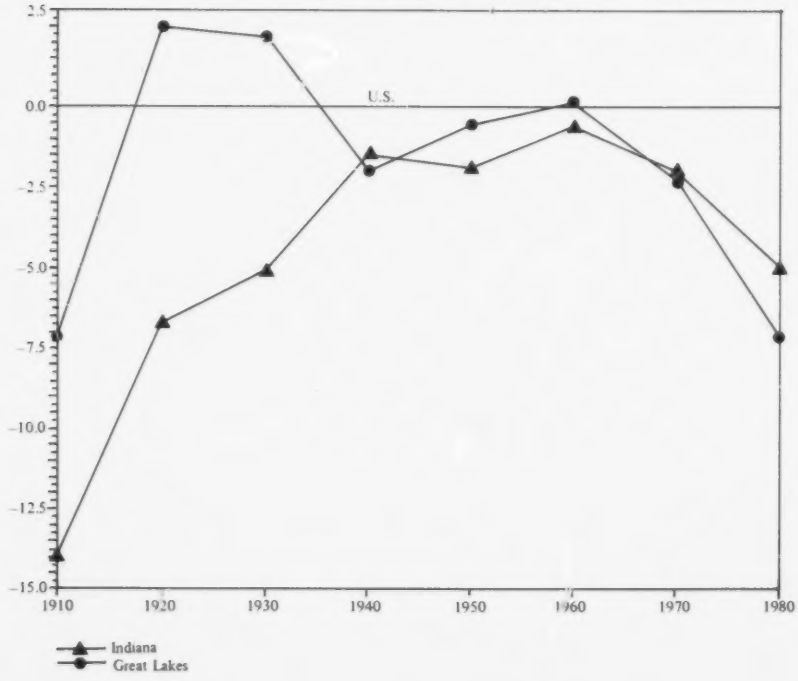
Figure 3 shows per capita personal income for Hoosiers in 1980 was $8,936 or 94% of the national average. Indiana's per capita personal income has not matched the national average since 1969 and in 1980 was at its lowest level relative to the nation since 1941.

With the exception of 1961, per capita personal income in the Great Lakes has exceeded the national average since 1929. Both Indiana and the Great Lakes peaked, relative to the nation in 1954, at the end of the Korean War.

CYCLICAL SENSITIVITY

Differences in quarterly percent changes in total personal income are one indicator of cyclical sensitivity. When the U.S. economy

Figure 2
PERCENT DIFFERENCE IN GROWTH RATES RELATIVE TO U.S.
(decade ending in years shown)



shows a strong rate of growth, a very cyclical state will show an even stronger rate of growth. When personal income growth in the U.S. is sluggish, a highly sensitive state will have a yet slower rate of growth.

Figure 4 shows that Indiana is a very sensitive state compared to the nation's business cycle. The chart is calibrated in years, but the data are plotted for each quarter from the second quarter of 1958 through the first quarter of 1981.

In general, when the nation's personal income advances, Indiana advances faster; when the nation slows, Indiana not only slows but sometimes falls back. The chart shows percent change in nominal dollars, that is, not adjusted for inflation. In no quarter since 1958 has the nation failed to have some positive advance in nominal personal income. But eight times in that period Indiana has had actual declines in nominal personal income.

Figure 3
PER CAPITA PERSONAL INCOME, INDIANA AND GREAT LAKES, AS A PERCENT OF U.S.

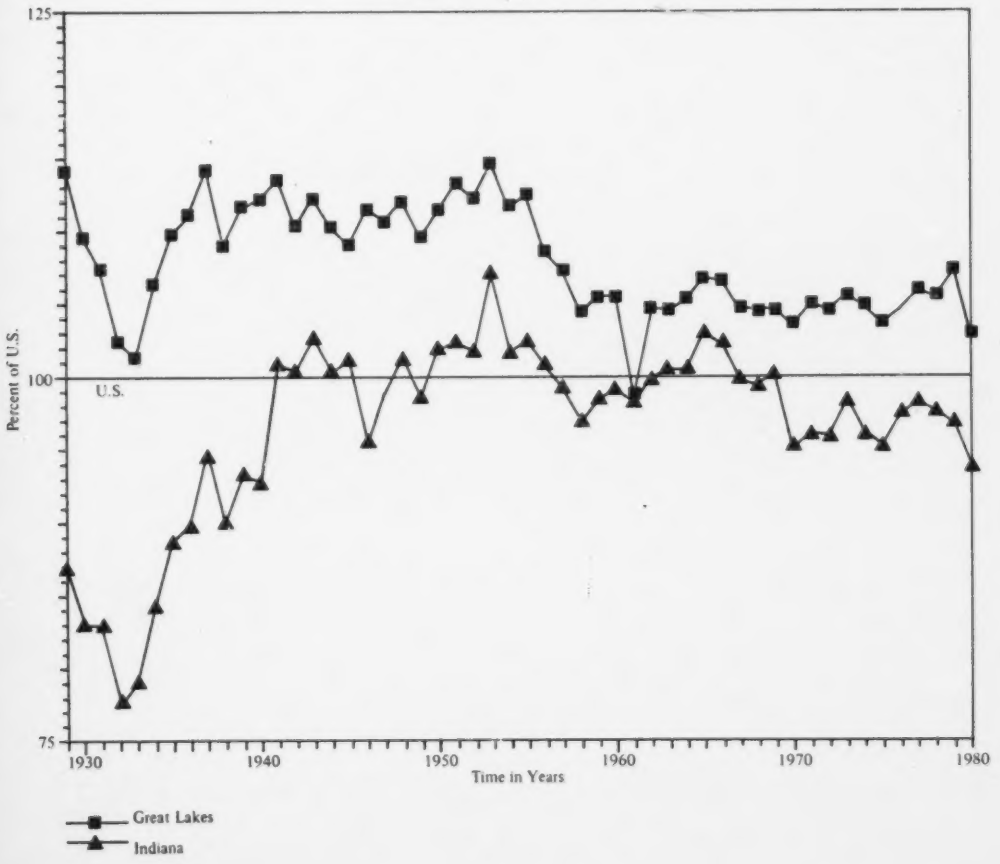
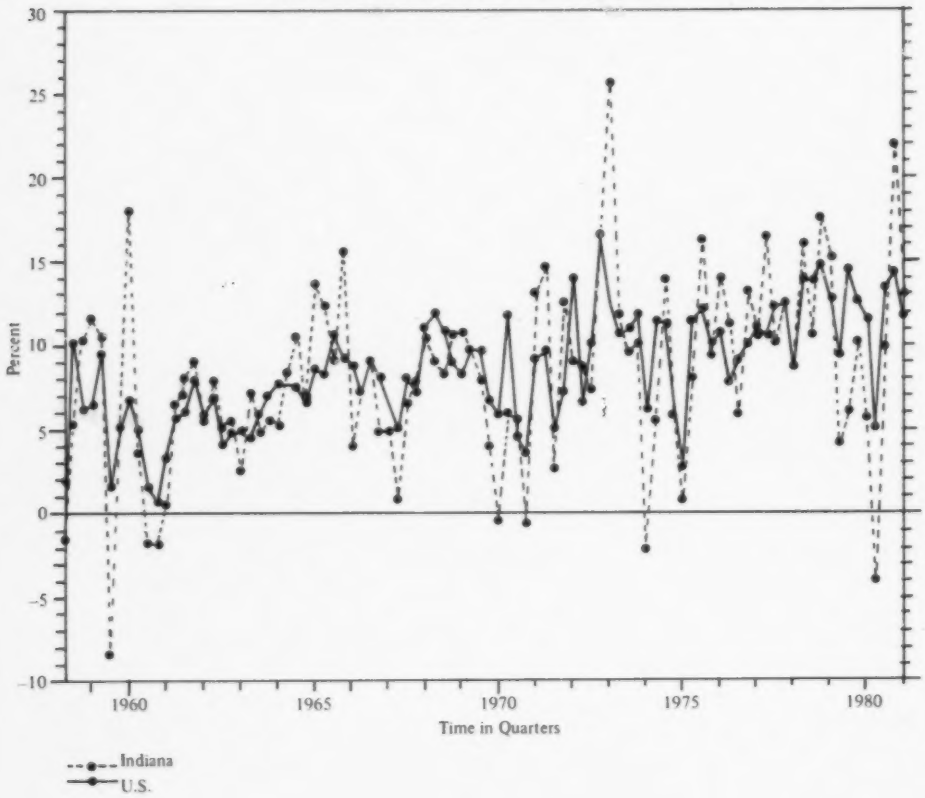


Figure 4
QUARTERLY PERCENT CHANGE OF
PERSONAL INCOME FOR INDIANA AND U.S.



STRUCTURE OF EARNINGS

Manufacturing accounted for nearly 41% of the earned income of the people of Indiana in 1979. (See Figure 5A.) For the Great Lakes, manufacturing generated nearly 37% of earnings, and for the U.S. 26%. (See Figure 5B and 5C.)

For the nation, the region and the state, the relative importance of manufacturing has declined since 1969. But the decline in the importance of manufacturing has been less in Indiana than in either the region or the nation. An industry's relative importance is measured by its location quotient. Manufacturing's location quotient in Indiana in 1979 was 1.56 (equal to 40.7% divided by 26.1%); this represented an increase from 1969 when the location quotient for manufacturing in Indiana stood at 1.47. In other words, Indiana has become more specialized as a manufacturing state in the past decade. The same conclusion can be drawn for

Figure 5A
STRUCTURE OF EARNINGS
FOR INDIANA, 1979

	1969	1979
Farm, Mining, & Other	4.7%	3.8%
Construction	6.6	6.1
Manufacturing	42.4	40.7
Trans., Comm., & Pub. Util.	6.0	6.8
Wholesale & Retail Trade	14.6	14.9
Finance, Insurance & Real Estate	3.9	4.3
Services	10.5	12.2
Government	11.3	11.2

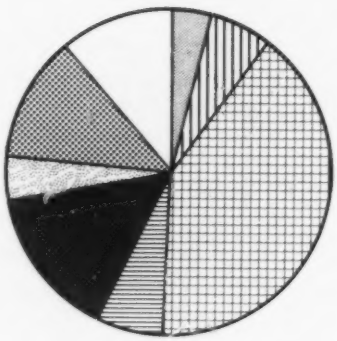


Figure 5B
STRUCTURE OF EARNINGS
FOR GREAT LAKES, 1979

	1969	1979
Farm, Mining, & Other	2.9%	3.3%
Construction	6.5	5.5
Manufacturing	39.6	36.9
Trans., Comm., & Pub. Util.	6.8	6.9
Wholesale & Retail Trade	15.9	15.6
Finance, Insurance & Real Estate	4.3	4.8
Services	12.6	14.7
Government	11.9	12.3

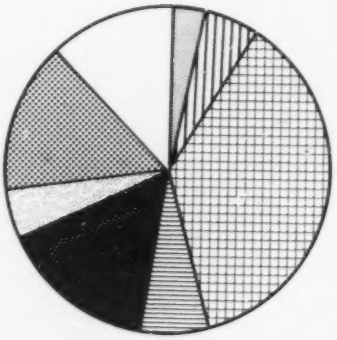


Figure 5C
STRUCTURE OF EARNINGS
FOR U.S., 1979

	1969	1979
Farm, Mining, & Other	4.6%	4.6%
Construction	6.2	6.1
Manufacturing	28.6	26.1
Trans., Comm., & Pub. Util.	6.9	7.7
Wholesale & Retail Trade	16.5	16.6
Finance, Insurance & Real Estate	5.3	5.8
Services	15.0	17.1
Government	16.7	16.0

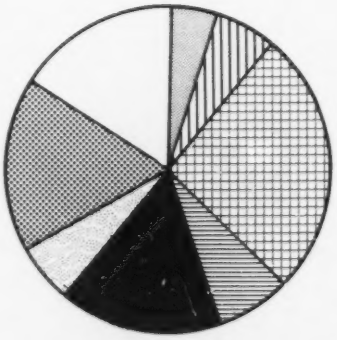
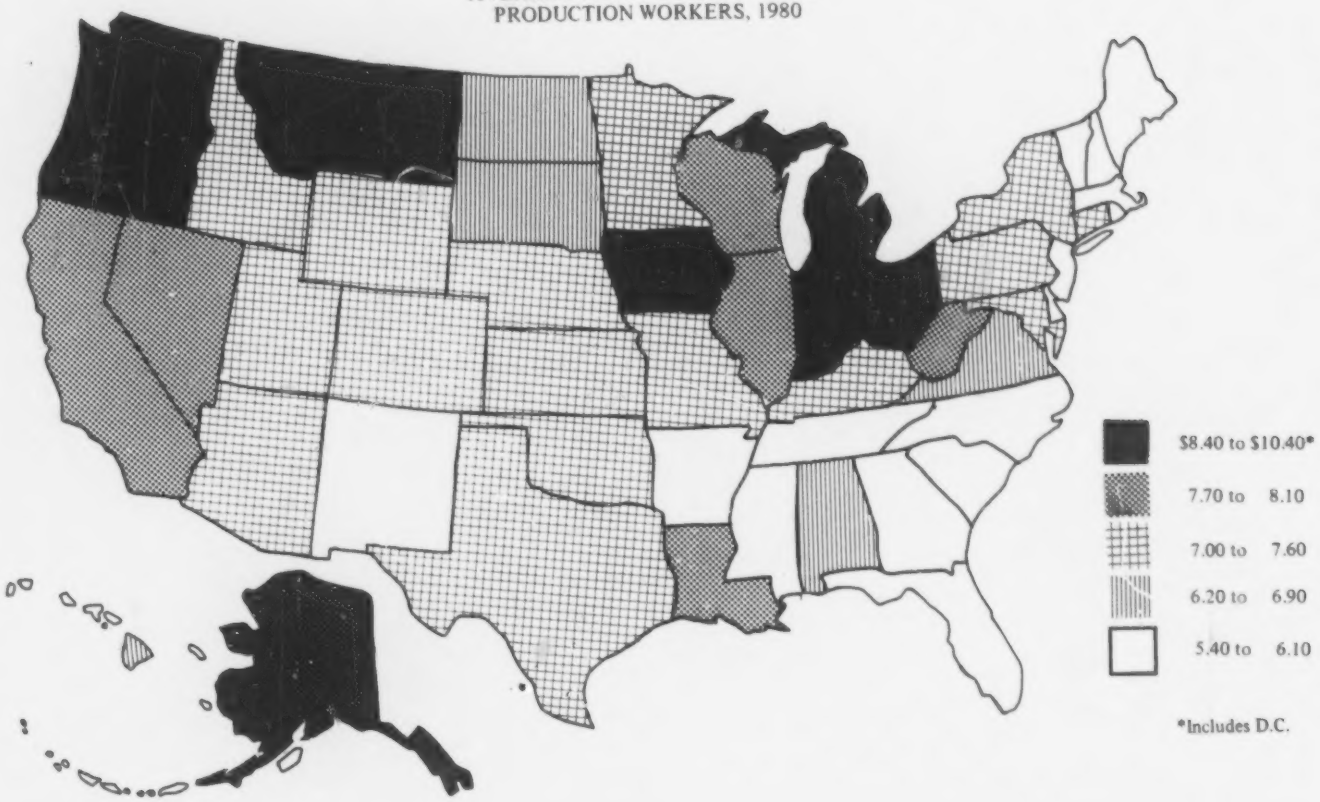


Figure 6
AVERAGE HOURLY EARNINGS OF
PRODUCTION WORKERS, 1980



the entire Great Lakes region.

AVERAGE HOURLY EARNINGS

Production workers in Indiana averaged $8.48 per hour, or 17% more than the national average. (See Figure 6.) The mix of industries, the amount of capital, and the skill of the workers all contribute to this disparity in earnings across the nation. All of the Great Lakes states exceed the national average of $7.27 for 1980 by at least 10%.

VALUE ADDED PER DOLLAR OF WAGES AND NEW CAPITAL EXPENDITURES PER DOLLAR OF WAGES

Value added per dollar of wages in Indiana manufacturing is below the national average. Since the mid-1960s this measure of productivity has been declining.

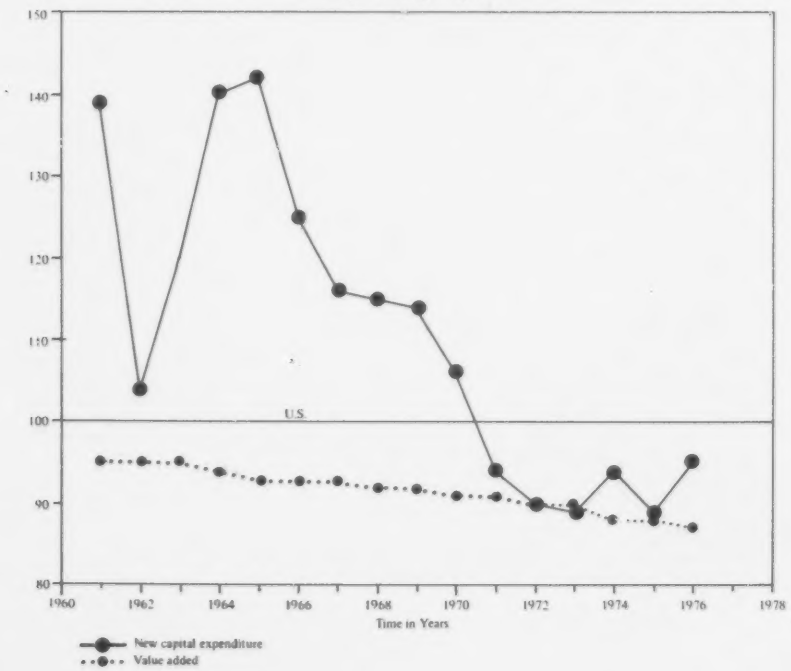
Figure 7 shows Indiana data as a percent of the national average. The figures are three-year moving averages to reduce year-to-year volatility and to identify the trend.

Productivity, and ultimately wages, of manufacturing workers depends on capital investment. In the 1960s Indiana was above the national average in attracting capital for manufacturing. (See Figure 7.) Since the mid-1960s the trend has been downward and the state has slipped below the national average.

MANUFACTURING STRENGTHS

Indiana is highly specialized in manufacturing.

Figure 7
VALUE ADDED BY MANUFACTURER PER DOLLAR OF WAGES AND NEW CAPITAL EXPENDITURES PER DOLLAR OF WAGES OF PRODUCTION WORKERS, INDIANA/U.S.
(3-year moving average)



Hoosiers represent 3.5% of all manufacturing employment even though they account for only 2.6% of the nation's total employment.

Figures 8 and 9 depict a classification of Indiana's manufacturing industries. The vertical center line separates the slow growing industries within the manufacturing sector. The period of time is 1973 to 1978. Growth is measured in terms of employment, not output.

The horizontal center line separates those industries that exceed Indiana's average specialization in manufacturing. Those above the

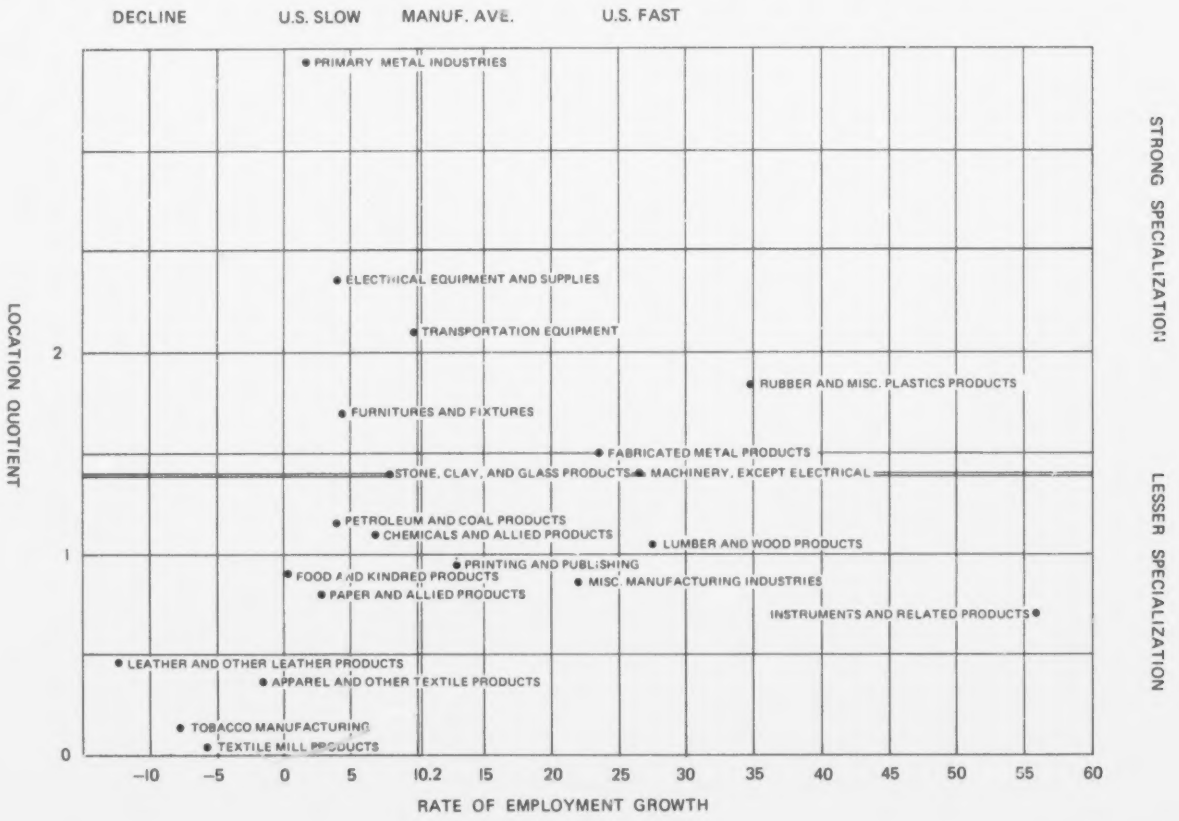
Figure 8

Classification of Indiana Manufacturing Industries

	SLOW GROWING	FAST GROWING
STRONG SPECIALIZATION	Primary Metal Industries *Secondary nonferrous metals* Electrical Equipment and Supplies *Electrical industrial apparatus* *Communication equipment* *Electronic components and accessories* *Miscellaneous electrical equipment and supplies* Transportation Equipment *Railroad equipment* Furniture and Fixtures *Office furniture* *Partitions and fixtures* *Miscellaneous furniture and fixtures*	Rubber and Miscellaneous Plastic Products *Plastic products* Fabricated Metal Products *Metal cars* *Metal forgings and stampings* *Metal services, nec.* *Miscellaneous fabricated metal products* Machinery, Except Electrical *Engines and turbines* *Construction and related machinery* *Special industry machinery* *General industrial machinery* *Office and computing machines* *Refrigeration and service machinery* *Miscellaneous machinery, except electrical*
LESSER SPECIALIZATION	Stone, Clay and Glass Products Petroleum and Coal Products Chemicals and Allied Products Food and Kindred Products Paper and Allied Products Leather and Leather Products Apparel and Other Textile Products Tobacco Manufactures Textile Mill Products	Lumber and Wood Products *Wood containers* *Millwork, plywood and related products* *Logging camps and logging contractors* Printing and Publishing *Periodicals* *Books* *Miscellaneous publishing* *Commercial printing* *Manifold business forms* *Printing trade services* Miscellaneous Manufacturing Industries *Engineering and scientific instruments* *Mechanical measuring control devices* *Optical instruments and supplies* *Watches, clocks and watchcases*

Figure 9

CLASSIFICATION OF INDIANA MANUFACTURING INDUSTRIES



line, therefore, are the industries in which the state is most specialized. Specialization in industries below the line is less strong.

PROJECTED GROWTH IN REAL EARNINGS AND EMPLOYMENT

Real earnings in the United States are projected by the U.S. Bureau of Economic Analysis to grow 106% from 1978 to 2000. In the Great Lakes region, however, real earnings are projected to grow only 94% over the same period. Leading the Great Lakes states will be Indiana, where real earnings are projected to grow 105%, or just slightly slower than the nation. (See Figure 10.)

During the same twenty-two year period, employment in the United States is projected to grow 29%. The Great Lakes region, which is projected to grow only 22%, once again trails the nation. Michigan, at 28%, is expected to be the Great Lakes leader in employment growth. Indiana's projected growth in employment is second among the Great Lakes states at 22%.

PROJECTED SHIFTS IN REAL EARNINGS AND EMPLOYMENT

Column one of Table 1 shows the amount of real earnings and number of employed in Indiana for various broad industrial classifications for 1978.* The second column shows the

Figure 10
Projected Growth in Real Earnings and Employment

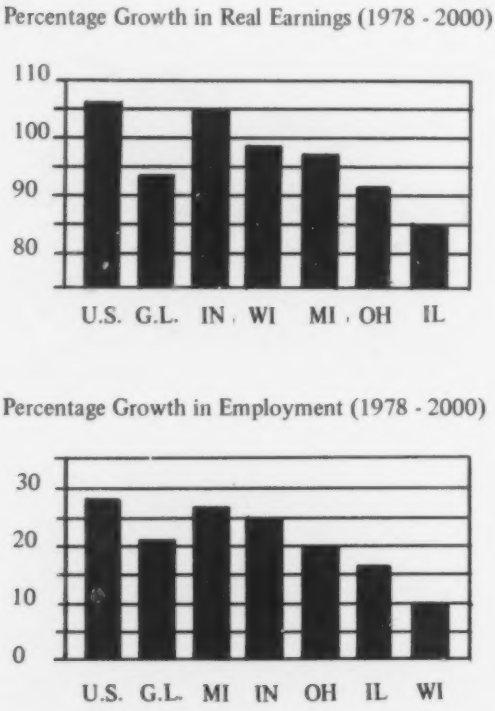


TABLE 1
INDIANA
(Earnings in millions of dollars; Employment in thousands of persons)

	1978	Projected 2000	Projected Change	Shift
TOTAL				
Earnings	*22,088*	*45,388*	*23,300*	*– 89*
Employment	2,482	3,098	616	–116
Agricultural Services				
Earnings	*45*	*76*	*31*	*– 15*
Employment	8	9	1	– 2
Mining				
Earnings	*142*	*370*	*228*	*56*
Employment	9	14	5	3
Construction	*1,319*	*2,769*	*1,450*	
Earnings	130	174	44	*13*
Employment				6
Manufacturing				
Earnings	*9,251*	*17,905*	*8,654*	*–385*
Employment	747	877	130	– 32
Nondurable				
Earnings	*1,787*	*3,185*	*1,398*	*– 92*
Employment	171	191	20	– 5
Durable				
Earnings	*7,464*	*14,720*	*7,256*	*–617*
Employment	576	686	110	– 38
Transportation				
Earnings	*1,487*	*3,162*	*1,675*	*5*
Employment	117	143	26	1
Wholesale Trade				
Earnings	*1,150*	*2,329*	*1,179*	*63*
Employment	110	138	28	– 5
Retail Trade				
Earnings	*2,086*	*4,046*	*1,960*	*– 81*
Employment	410	513	103	– 43
Finance, Insurance, Real Estate				
Earnings	*931*	*2,213*	*1,282*	*73*
Employment	106	153	47	– 5
Services				
Earnings	*2,626*	*6,894*	*4,268*	*353*
Employment	412	608	196	– 6

Table 1, continued

	1978	Projected 2000	Projected Change	Shift
Government				
Earnings	*2,514*	*4,746*	*2,232*	*219*
Employment	359	403	44	– 11
Federal, Civilian				
Earnings	*482*	*874*	*392*	*31*
Employment	40	45	5	2
Federal, Military				
Earnings	*82*	*130*	*48*	*0*
Employment	27	27	0	0
State and Local				
Earnings	*1,951*	*3,742*	*1,791*	*135*
Employment	292	331	39	– 19

level these are expected to reach by the year 2000. The third column shows the absolute change in real earnings and employment projected over this twenty-two year period. Column four shows the shift in concentration into or out of each industry for the area in question as compared to the nation. That is, according to column three in Table 1 total employment in Indiana is expected to grow by 616,000 workers between 1978 and 2000. However, employment in the nation is expected to grow faster than in Indiana, and if the state were to keep up with the national rate of growth, it would have to grow by 116,000 more workers than projected. Hence, Indiana is projected to have a *negative* shift in its share of the nation's employment of 116,000 workers. Indiana is projected to grow slower than the nation in real earnings and is expected to lose $89 million in real earnings to other, faster growing states by the year 2000.

Most notable among the industries contributing to Indiana's decline in real earnings and employment relative to the nation is the durable goods industry. If Indiana were to grow at the national rate in this industry, the state would provide 38,000 more jobs and $617 million more income by the year 2000 than is projected. Retail trade is also expected to grow much more slowly in Indiana than in the nation. While there will be 103,000 new jobs in retail trade in Indiana by 2000, this will be 43,000 short of growing at the national rate.

Offsetting some of these losses will be the mining industry, where Indiana is projected to grow faster than the nation, adding 3,000 jobs and $56 million more jobs and real income. In addition the service industry is expected to add $353 million more income to the state than if Indiana grew at only the national rate in service industry.

FINAL NOTE

Projections and trends are not immutable efforts by public agencies and private firms can reverse trends and develop a more positive future. These trends do alert us to where we are headed without such efforts.

*Real earnings in the U.S. are *projected* by the U.S. Bureau of Economic Analysis.

Insights on the Heartland

I.

HOWARD G. SCHALLER

Professor of Business Economics and Public Policy; Executive Associate Dean, Indiana University, School of Business

The set of charts that you have received depict trends in a number of series describing the economies of the Great Lakes and Indiana. I'd like to make four observations drawn from these data.

First, it is obvious that population, employment, and, to some extent, per capita income have not grown as fast in the region and Indiana as they have in the nation. However, these three variables have not declined in the absolute as is sometimes mistakenly believed. There are more people living and working in the region, and their real per capita income is higher than ever.

Second, these declines relative to the nation actually started in the late 1950s and early 1960s. Contrary to popular misconception, they did not originate in just the last few years. The dramatic difficulties in the automobile industry in recent years are simply an exaggeration of long-term trends.

Third, there are two principal forces behind these relative changes of the past few decades: dependence on manufacturing of durables and public policies. By the end of World War II the region and Indiana were highly dependent upon the manufacturing of durables. As a result the seven recessions—and we may be in the eighth one—since World War II have had a more devastating effect on this region and this state than on the nation as a whole. Moreover, fighting inflation with high interest rates has also affected us more than the nation. The second cause of the relative declines has been public policies. These public policies were not aimed at the Midwest but they did stimulate faster growth elsewhere. For example, the TVA and other power programs, the Central Arizona Project and other irrigation projects, have spurred growth outside the Midwest. The rise in the importance of military and space programs has stimulated more growth elsewhere than in Indiana. It could be that the influence of these policies will diminish in the future.

My fourth observation from the data is that the forces described have left us with a good base but with some structural problems. We

have more people and more persons in the labor force than ever, and we have become a high-wage economy, which can be good. However, we seem to have a structural problem, because the value added per dollar of wages and the plant and equipment expenditures per dollar of wages are declining in the state relative to the national average. The nub of our problem is the same as that of the nation only more so. We need to encourage investment.

Finally, let me draw your attention to Figure 2, on per capita personal income. Jobs and employment are certainly important, but the well-being of the citizens of the state also depends very much on their incomes. I would much rather have the lower population and employment figures and per capita income of Indianapolis than I would similar figures, say, for Calcutta. That's, of course, an exaggerated analogy, but the per capita incomes are important. I think we sometimes dwell a little too much on population. Figure 2 presents per capital personal income in the state as a percentage of the United States per capita personal income. All those numbers are percentages. I make four observations from the table. One, the state has not done too badly compared to the nation over the last two decades. Second, decline relative to the nation has centered in the metropolitan areas. The nonmetropolitan areas have held their own. Third, some metropolitan areas have held their own or even improved in Indiana: namely, Evansville, Terre Haute, Kokomo, Lafayette, and the Calumet area. The fourth observation is that the *relative* declines are centered in Indianapolis, Ft. Wayne, South Bend, Elkhart, Muncie and Anderson. In other words, I think that some of the state's problems can be pinpointed to certain industries in certain areas.

II.

J. FRED BATEMAN

Professor of Business Economics, Department Chairman, Indiana University, School of Business

I am going to expand a bit from the local issues. My feeling is that this is not just a regional problem, it is part of a national transition, and you cannot really understand what is happening in the state or in the Midwest unless you understand what's happening in the entire United States.

If as a nation we have difficulty comprehending the dimensions of the postindustrial society that we are supposedly entering, it is to some extent the result of our failure to understand the industrial one we presumably are leaving behind. Despite the attention historically accorded accomplishments of the American industrial complex, we know relatively little about how it all began, how the earliest stirrings of industrial change emerged and survived and ultimately produced the modern national economy. Recently investigators have begun to look at this issue, and gradually we are learning a little more about how the American industrial complex started nationally and how regions differed in their responses to economic opportunities.

Many important new insights have come from this recent research. For example, let me take one that I want to carry through the discussion. Each period of transition in the past to a larger and more encompassing geographic market size has produced a major shock to the political, economic and social structure. Highly

localized markets emerged early in the nineteenth century, and in the overwhelmingly agricultural economy the problem of urban agglomeration accelerated. Businessmen sought new methods of finance, marketing, and production. They faced, for example, critical shortages of labor that constrained their output goals, particularly in the East. Consequently, new immigration policies, innovative labor practices, and improved banking institutions emerged. But the businessman remained largely a local figure, one recognized and respected by his community. As the century wore on, however, greater stresses developed as local markets expanded to regional ones, producing one of the most trying and hectic periods of economic adjustment in U.S. industrial history. This was an era of substantial turmoil and produced such political philosophies as Populism, which was centered here in the Midwest, where the suspicion of big business was strong. The trend toward national markets quickly followed, producing a twenty-year period of intense industrial competition, falling industrial and agricultural prices, the final dominance of mass production in the factory system, the creation of such new American developments as a managerial heirarchy to control these new enterprises, and ultimately it produced the Interstate Commerce Act and the Sherman Act. By the turn of the century America was transformed into the industrial leader of the world, with much of that industrial strength concentrated here in the Great Lakes area. The age of steel had begun and the Midwest was at the very center of it. As a historical change it was costly but it was swift.

In the economic sphere and in many other ways the twentieth century seems calm and orderly by comparison. The essential industrial structure was set by World War I: markets were oligopolistic and the Midwest was the manufacturing heartland. We have been resting on our structures every since. The era of American economic and political dominance in the world permitted us to refine and develop this formidable productive monster that was the U.S. economy in the years following World War II. If we take the historical perspective, however, it seems reasonably clear that that period is over and that we now live in a time that historians, looking back, will neatly label "the end of an era," but that seems so fuzzy and confusing to those of us who are actually living through it. This transition may have begun as early as the 1950s; clearly it was underway by the 1970s. It is still underway, and by *Forbes* magazine at least, it is seen as "trouble in the heartland."

What has caused this disruption? Let me suggest the obvious in continuing the line of argument above. Since World War II our economy has been evolving from a secure cocoon of a large and rich national market that fostered our development during the century after 1870 into an international market. At first, this change was not so evident and Americans reacted, as they have historically, by resisting international involvement in a way that few nations could. But by the 1970s, it was evident that our economy was in yet another of its great transitions. Old ways of doing things, in production, finance, marketing or whatever, had become outmoded and adjustments were necessary.

The development of American business in international markets has had particular impact on these traditional industries of the Midwest–especially automobiles and steel–but is not, of course, the only reason that economic adjustments need to be made in this area. Any region characterized by dependence on production of durable goods, which are subject to high price and income elasticity–they are highly responsive to changes in income or prices–will obviously suffer cyclical distress in an economy characterized by simultaneous inflation and stagnant or declining income levels. One could hardly write a more depressing script even for an otherwise healthy economy and need look no further to find a villain than these basic and impersonal economic forces. I would hasten to add, however, that neither OPEC nor the

Japanese have helped this situation.

Consider still another complicating factor in our evaluation of the Midwest economy and even of the American economy as a whole. Most Americans, especially those who are in positions of power in business and government and other areas, tend to use as their benchmark for judging our economic performance that period from 1945 until the early 1970s. There is hardly a more distorted yardstick. Historians may someday look back upon that period as a short-lived golden age. Energy was remarkably inexpensive for us, the dollar was the world currency, our labor force was disciplined and highly productive, the quality of industrial goods was improving, our national political power was at its peak, technological change was running high, and the economists in Washington were telling us that they were going to fine tune away the cyclical economic problems. Even the weather cooperated—U.S. winters were milder than historically—and helped our always productive agricultural sector become even more productive. In some years of the 1960s the growth rate was doubled the national historical average. What an act to follow.

Let me now describe an economy for you. This is a quote from a paper that I've read recently. "There was an abundance of physical capital but it was underutilized. There was a highly skilled, well trained, and experienced labor force but its skills did not match the needs of the time. Its business and other social institutions were highly developed but they simply did not seem to work well any longer." Sound familiar? It's a description of the Dutch economy of the eighteenth century. It's also a description, of course, of the American South right after the Civil War, Britain after World War II—and some would even say after World War I—and obviously, to a far lesser degree, it describes the midwestern industrial economy as we enter the 1980s. In each case what developed was not necessarily a stagnant or decadent economy, but was surely an obsolete one.

I wish to close on a positive note. I have been studying the midwestern and southern economies for more than a decade now. This investigation reveals, as do the lessons of both economics and history, that humans are supremely adjustable. Economics is not really a dismal science—its whole foundation rests on the belief that substitution is almost always possible and if given the appropriate incentives people will adjust. History indicates the same. Change and transition create not only uncomfortable disruption, they also create opportunities. From what I have learned from the historical analysis of the Midwest, I think that few regions are better equipped—attitudinally and otherwise—to respond to these challenges. This region nurtured what Professor William Parker of Yale has called "the business culture" in the United States; that is, a society that has produced individuals and patterns of response that are uniquely geared toward perceiving economic needs, toward training people in the skills of business, and toward changing from old ways when that seems necessary. This culture has produced one of the unique regions of the world; one that combines agriculture, industry, and services in a way that very few ever have.

Adjustability is obviously called for. The worst way to deal with today's situation, both history and economics suggest, would be to build in greater inflexibility, to try to freeze things as they are, or, even worse, to try to restore some past environment that seems normal just because it used to exist. New England and the South have made recoveries from far greater economic troubles during this century. Given the strength of its business background it seems obvious that the Midwest can do likewise. Should it not, then it too runs the risk of becoming yet another of history's obsolete economies, persisting in old and comfortable ways more suitable to the past than to the future.

III.

HARVEY C. BUNKE

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I'm to play the role of Cassandra. I'm supposed to point out the difficulties that face the Midwest in the coming decade. That's not a task I'm particularly comfortable with; I'd much rather talk about the mini-boom that we're having in Bloomington now. But that's not my assignment. Before I comment on the difficulties, at least let me look at some of the brighter aspects.

I want to consider four myths. In a sense they have already been alluded to, but I might present them in a somewhat different form. *Myth one:* The North is losing people. The reality is, of course, that the population is growing, but it is growing less rapidly in the North than in the South. This slower growth has produced a certain amount of consternation if for no other reason than that it has caused a reduction in the number of representatives in Congress from 213 to 196 for the Midwest and the Northeast. That's important. *Myth two:* The North is losing jobs. Employment in every northern and midwestern state has grown over the last ten to fifteen years. It hasn't grown as fast as in the South or in the West, but growth is nevertheless evident. *Myth three:* Industry has abandoned the North for the South and the West. Such abandonment is not borne out by studies, which instead seem to show that more than 90% of the loss of jobs in the North is due to plants closing down or to contractions such as we are seeing in the automobile industry. According to these studies less than 5% of the jobs in the South comes from industrial migration out of the North. *Myth four:* The North is being stripped of its highly skilled labor force and is being left with a residual of low-income people who are dependent on welfare support. The truth is, the South has historically had a higher incidence of poverty and still does. We would do well to remember the Midwest, with its more than 40,000,000 people and its gross product of more than $500 billion, is the home of the industrial complex that produces 70% of American steel, two-thirds of its autos, 60% of its machine tools, and that it rests on a very solid and properous agriculture base producing everything from corn to peaches. Moreover, we would do well to remember that the names of such cities as Milwaukee, Muncie, Indianapolis, St. Louis and Detroit are cast in nameplates on machinery that appears throughout the world.

But while we should recognize myths for what they are, we should also recognize certain problems, some of which are so acute and of such magnitude that they carry with them social dislocation and widespread personal suffering. In the last decade, for example, steel lost more than 100,000 employees. Last year's car sales for U.S.-made cars dropped to the lowest level in nineteen years, causing carmakers to suffer red ink to the tune of some $4 billion.

When we think of economic hardship we are, of course, inclined to think of Detroit and the auto industry with its quarter of a million unemployed. But beyond Detroit there are many small tragedies being played out in cities and towns engaged in supplying auto parts to the major automakers. If you come with me to any assembly plant you can get a feeling for what's happening throughout the Midwest. In these assembly plants you can see packages, crates, and parts coming from such places as Warner Gear Division, Muncie, Indiana; the Akro Corporation, Canton, Ohio; Yale Rubber Manufacturing Company, Sandusky, Michigan; Rockwell International, Logansport, Indiana; American Hose Corporation, Winchester, In-

diana; Huron Plastics, St. Clair, Michigan; Stant, Connersville, Indiana. And these are only a few of the countless number of plants that are involved in supplying the parts that go into making the automobiles that Detroit produces. Half the companies supplying auto parts employ twenty or fewer employees. Because so many of the companies are so small they are overlooked as we focus our attention on the troubled automakers. But to employees the economic distress is no less severe whether they are discharged by a large or a small company. Last year parts suppliers shut down some eighty-five plants. An Arthur Andersen study predicts a loss of some 400,000 additional jobs in the parts business in the years through 1985.

These are only a few illustrations of the problems that face the heartland. Other difficulties facing us stem from the fact that the region is suffering from old age—its presence is everywhere. We see deterioration in our cities. I'm from Wisconsin, and recently I went through a number of industrial cities that I knew well as a child. It was heartrending. Kenosha, Racine, Fond du Lac--they used to be jewels. Our aging factories have old equipment. The papermills in my home area were really leaders in the thirties. Managers of those mills tell me that now they're using machines and equipment that are sixty years old.

Our conservative management and our labor unions at times seem to be acting as if they were in the decade of the 1930s instead of the 1980s. In our mature industries labor and management sometimes seem to get caught up in holy wars. Last year's bitter six-month International Harvester strike is a prime illustration. No need to assign blame. The point is that International Harvester was, as a result of industrial conflict, deeply and profoundly wounded. In fact, there is growing doubt as to whether the organization will be able to survive. We all know its impact on the operations of the Fort Wayne plant and for a time it appeared that the Indianapolis plant would close. There was a time when American industry in general, and our heavy industries in particular, could tolerate these battles. Our position was so strong, our productivity was so high, that despite the damage such holy wars inflicted we were capable of dominating world markets. We all know this is no longer true.

In facing the future, we need to ask the following questions: How much in the future should we look to mature industries? How much, for example, should we depend on steelmaking with its relatively simple technology that is easily copied? Bulgaria, for example, can manufacture steel, but it will be a long time before the developing world will master the 256K semi-conductor memory chip or the genetically altered micro, which one day may be custom designed to eat ore and spit out refined metal.

Can we do anything to further a favorable midwestern climate for entrepreneurial activities? In recent times it has been the new small company that has provided the jobs. In the last decade, for example, companies in *Fortune's* lists of the 1,000 largest firms reported virtually no growth in jobs, while between 1969 and 1976 smaller firms created 7.4 million jobs, nearly four times as many as the government.

What, if anything, can be done in some of the more mature industries to encourage research and development?

What can be done to change the relationship between labor and management from an adversarial to a cooperative one? Currently the relationship between labor and management too often reminds us of political battles for power rather than cooperative efforts designed to increase productivity.

Are state and local policies designed to encourage economic development? Can we do more?

Do we need to modify our tax policy to make Indiana industrially more attractive?

How do we finance our social services when industrial activity is stagnant and the federal government is cutting back our financial aid to social services?

IV.

JOHN M. MUTZ

Lieutenant Governor, State of Indiana; Director, Indiana Department of Commerce

I am really pleased to be able to participate with you and with the School of Business here at IU as we, through a series of events, commemorate a continued development of the campus here. I am also pleased that the Business School decided to call this conference "Hope in the Heartland."

First, I want to review a few basic truths about Indiana's economy. Then I will talk about the growth potential for our state. And finally I will outline a strategy for realizing the potential that I believe we have.

We know that if we are going to look into the future we have to be sure about where we are right now in order to plan. Right now the unemployment rate in Indiana is second only to Michigan. One of the major reasons for this is that we are too dependent on the auto and steel industries and those industries that serve auto and steel manufacturing. It is obvious to me that Indiana's economy is out of balance and that one of our goals should be to strengthen our basic industry while diversifying the economic base of the state.

Some other truths about Indiana are reported in a study of population, income and employment trends that was recently published by the Indiana University School of Business. Based on that study, the review of the past ten years is discouraging. Let's examine some of the trends, particularly as they relate to Indiana's location in the so-called Frostbelt.

The conventional wisdom among government officials, businessmen and economists, is that there is an inexorable migration of businesses moving away from the northeast and north central regions of the country into the Sunbelt states of the South and West. There are many theories as to why this seems to be the case. They boil down to three. The first theory suggests that businessmen operate as profit maximizers in a traditional manner. They choose to move to the Sunbelt because the cost of doing business there is lower. Labor costs, taxes, transportation, and energy costs are usually cited in this kind of an assessment.

The second theme suggests that businessmen operating in a more humanistic fashion are not merely concerned with profit. The cost of doing business is clearly relevant to their decision but they also look at nonfinancial attributes of the location such as quality of life, climate, recreational opportunities, educational opportunities, and the like. In essence they are willing to accept some tradeoffs against profits for the benefits of those lifestyles.

The third and newest theme relates to technology, and is based on a systems approach to business decisionmaking. It suggests that technological innovation is a primary reason for economic growth. New technology outdates existing products and processes and hastens the decline phase of the product life cycle. The companies that make those products may even close, but the companies created by the new technologies open in the South and West where the labor pool is less skilled and requires lower wages. This school of thought observes that technology applied to production has generally resulted in less, not more, demand for skilled labor; therefore, capital is essentially being substituted for the labor of skilled people.

That's an oversimplification of why many feel the Sunbelt has grown at the expense of our area and the Northeast. Some economists are even challenging whether the Sunbelt phenomenon has been overplayed. A professor of economics at Clemson, Richard MacKenzie, wrote an article in a recent issue of the *Wall Street Journal* entitled "Eight Myths of the Frostbelt Sunbelt Fight". Professor MacKenzie

doesn't ignore the fact that there are real problems in the Frostbelt but things may not be as chilly as we think. For example, he says that 90% of all businesses that move stay in the same area of the country. His figures indicate about three fourths even stay in the same state. Even the layoff rate in the North over the past twenty years is lower than in the South and West.

There are several reasons why many economists think that growth in the Sunbelt will level off in the next few years. Accelerating transportation costs will make our central region more attractive to business because we are simply better located and closer to more markets. Natural resources, such as land, water and energy are becoming increasingly scarce in the Sunbelt, driving up prices and reducing cost advantages. The same thing, I think, can be said about labor costs. Still another reason deals with the ability of getting quality products to market. Our skilled workers have a tradition of being on the cutting edge of new innovations. Entire industries like steam machinery, electrical equipment, lighting, appliances, cars, radio and television, were incubated in the northeast and northcentral United States. Business will change rapidly in the next several years and we have a work force that is accustomed to keeping up the pace.

The actual impact on Indiana of development in the Sunbelt is difficult to measure exactly, and there is considerable conjecture about the future of the Sunbelt influence on our part of the United States. But the trends of the seventies are in the past. I believe we are somewhat more concerned now with what's going to happen as far as the future is concerned. We have tremendous strengths; our challenge is to marshall our resources so that we can take advantage of those strengths.

Is this something that we can reasonably expect to accomplish? I think it is assuring to know that a respected national economic forecasting firm, Evans Econometrics, has produced a long-range, national economic forecast which showed an economic recovery by the Great Lake states with Indiana leading the way. This forecast suggests that Indiana has the potential to grow as fast as many of the Sunbelt states when measured by such factors as total output, total personal income, total employment, and population. Of course, a forecast like this is merely a mathematical way of expressing informed opinion. There is a long way to go between opinion and fact, no matter how well informed that opinion happens to be. Such a forecast is probably better thought of as an expression of potential, and if we think of it in those terms the forecast does two things. First, it confirms what many of us has felt for a long time: our region has underlying assets and strengths that we can use to our advantage. Second, it places a tremendous burden on the leaders in both the public and private sector to see to it that this potential is realized.

I would like to share with you some of the basic assumptions that are part of the Evans forecast and that are critical to the outcome that it predicts. The results from the model are based in part on the assumption that petroleum costs will continue to increase and to drive up total costs of transportation, which will make this state's central location and proximity to markets increasingly important. The model also assumes that personal savings rates will grow from a current level of 5.5% back to the levels of 7 to 8%, which will help generate capital to finance the growth that is predicted. It assumes that inflation will drop to the range of about 5% and that needed education and training will take place to generate the right mix of job skills needed in the labor market. With this in mind let's take a look at what Evans forecast believes is the potential for economic growth in this state and the region.

Prediction: 1980-1990. Indiana's compound rate of growth and output during the last decade was a respectable if not spectacular 3.3% even in the face of all the problems the region (Illinois, Indiana, Michigan, Ohio, Wisconsin) experienced. During the decade of the

eighties, with many of the worst effects of the decline in the auto industry already behind us, the basic strengths of the region and the state will reassert themselves. The Evans Econometrics suggests the rate of growth and output will climb as high as 4.5% per year.

Jobs. Employment can be expected to grow significantly as increases in output demand cause businesses to expand their capacity. The rate of growth of 1.7% in the seventies will jump to a much stronger 3.5% in the eighties. That's the best in the region, but overall there is strength in the Great Lakes states. Indiana will have a million more people working in 1990 than it did in 1980, a total of over 3.7 million people.

Income. With the growth and output in employment we would expect to see significant gains in total personal income. The Evans model suggests that we could see a growth rate in real personal income of 4.6% in the eighties. That would put Indiana in front of all the Great Lake states and ahead of even the Sunbelt states (Arkansas, Louisiana, Oklahoma, Texas).

Population. If all this comes to pass we will see a significant upswing in population growth. As increased job opportunities cause fewer people to move out and some even to immigrate, the Evans forecast suggests an average 1.5% increase each year during the decade. Michael Evans predicts that 6.6 million people will live in Indiana by 1990.

I think most of you would agree that the Evans forecast is optimistic. It is easy to challenge these projections. But they are not a prediction: they are a view of potential. Realizing this potential will take a lot of hard work and cooperation between private business, the public sector, labor, management, and the university community. Traditional roles and concerns must be discarded to make way for innovative approaches to solving the problems of financing growth, training workers, disseminating knowledge of new processes and products, and in general creating an atmosphere in which the economy of the state and the region can flourish.

It is important to recognize that manufacturing will continue to be the engine that powers the economic growth in our region and for the next twenty years. There has been a shift in the structure of the American economy away from manufacturing to commerce, retail, transportation, and service. However, we believe that the vitality of the other sectors will be more dependent on investment in manufacturing than on any other single factor.

In the Indiana Department of Commerce we have identified nine major areas of economic development policy as most essential to the achievement of Indiana's growth. The nine areas are not generalizations in terms of implementation but are specific programmatic approaches to each of the things that are suggested. Some involve private sectors, some involve public sectors, some of them involve universities, some involve a combination of all of these. But the essence is that if you do not plan in the long range for economic development and diversification and change, then it is not likely to happen. Brief descriptions of the nine areas of concern follow.

One: A targeted industries program. We have limited resources. It is crucial that we identify industries outside the state and those already here with the greatest potential for growth. We will seek to induce investment in those targeted industries to stimulate growth of employment and value added. We have already begun to shift our marketing strategy from a shotgun approach to a rifle approach.

Two: A small business development program is aimed at creating those conditions necessary for rapid expansion among manufacturing establishments in Indiana now employing from about 100 to 500 employees. Most new jobs will be created in small and medium sized firms. These businesses have special needs that we must identify and help meet. The Corporation for Innovation Development, small business assistance programs, and so forth are aimed at this particular goal.

Three: We are proposing a major new program for technology, research, development and transfer. High technology is not an industry in and of itself. It must be viewed as a stimulant to greater efficiency in Indiana's manufacturing sector. Our task is to assure access to those new ideas, processes, devices, and component products that are essential to a competitive industrial base in Indiana. A superior higher education climate is important to attract to keep the talented individuals who will provide the creativity and energy for a successful high technology program. This excellent facility we are dedicating is a sample of the kind of commitment to quality that our universities and colleges must make if we are to train the leadership that is required. And I might also mention that, parenthetically, in the middle of this whole issue is how we harness that tremendous resource of private capital that, because of the Reagan incentive program and because of the cutback of government's involvement in research, will be available from the private sector. There must be a way to unify the capital of the private sector with the research potential of the university complex.

Four: A major effort to improve the processing and marketing of Indiana's agricultural commodities, machinery and equipment. This program has already begun. Indiana is eighth in agricultural exports and ninth in production. By increasing the processing and export of our agricultural products we can begin to influence the capital flows into the state necessary to finance business and industrial expansion.

Five: A natural resources development policy is aimed at reducing the import of energy into Indiana. We must begin to stem the flow of capital outside the state to finance our own energy needs. We do that by developing our own coal and oil shale potential. Surprisingly enough there is apparently more energy in the oil shale that is located in Indiana than there is in the coal, and I know the coal has been much ballyhooed by the coal industry itself. We also need to conserve the relative abundance of fresh water that is an increasingly valuable factor of production. (A careful look at water legislation may be required so that we have the ability to move fresh water where it's needed.)

Six: We are promoting a new labor-management dialogue that demonstrates to the investment community that management and organized labor in Indiana have a great deal in common. They are more concerned about their mutual interests in creating new jobs than in dividing up the returns from existing jobs. Governor Orr and I have created a labor-management advisory committee to sharpen Indiana's image as a cooperative, productive state. Good working relationships between management and labor will help increase worker productivity and will enhance the quality of life for people.

Seven: We have already started an industrial training program that continues to improve the quality of secondary and post-secondary vocational education. We can and must do a better job of providing task-specific training to employees. With the cost of capital at record highs it is crucial for expanding businesses to shorten the time frame between hiring an employee and having the employee fully productive. The time it takes for employees to become proficient in their tasks is perhaps the most crucial ingredient in the profitability of an operation.

Eight: We cannot afford to neglect transportation. One of the major assets of Indiana has been the transportation capability that we already enjoy. Manufacturers in general can rapidly move raw materials and component parts to the workplace and rapidly move finished products to the marketplace. Our ports on Lake Michigan and on the Ohio River are commercial avenues to the rest of the world. Further port development, which will require state appropriations, and continued availability of our railroad network are vital to maintaining our competitive advantage in transportation. The rail network is in great jeopardy at the present time, and creative solutions for solving

the railroads' problems is one of our toughest jobs.

Nine: We will maintain Indiana's favorable attitude toward existing and new businesses and toward the new ideas that fuel progress and jobs. Tax abatements for new equipment and direct incentives to new investment through a variety of state programs, including the Corporation for Innovation Development, were included in the nineteen-bill package with a $15 million annual price in the 1981 session of the General Assembly. Governor Orr and I asked for this program, and we were delighted that the legislature responded in the way that it did by enacting all nineteen bills and providing most of the money that was required to put the program in effect. That is the most comprehensive program for economic development ever passed by one state all at one time. To be sure, a number of states have programs we don't have and some more that we have, but they have gradually added them over a period of years. Revisions and additions to this program were passed in this year's session of the General Assembly and more are contemplated for those sessions that follow.

This is the nine-point strategy that we think is necessary, so that the state has a chance to live up to the Evans Econometric projections. I think it is pretty clear that this list of nine ideas is a bare-bones presentation. The meat that goes on those bones has to come from the cooperative actions of thousands of people in the state of Indiana.

Many of these new programs are already producing inquiries and concreate results. We have reason to believe that corporate decision-makers still have confidence in Indiana: the Claus Company, a major German manufacturer of farm machinery is locating in Columbus; Shoemaker Electric, a Chicago firm, is moving into its third Indiana plant; Kroger is building a major cheese processing plant in Crawfordsville. Reinvestment decisions by major companies are also encouraging us: by Chrysler, by International Harvester, and by the steel industry, which alone has committed $2 billion to the state of Indiana in the next four-year period – about 40% of its total contemplated new investment. Adding to the positive picture are labor-management concessions that have kept plants open and people on the job in cities like Indianapolis and Noblesville and Michigan City and South Bend.

After looking at all these reasons and our strategy for realizing our potential those of us in the Department of Commerce have concluded that, in fact, in the next decade, Indiana can pull even with the Sunbelt. If Indiana matches the potentials in the forecast this state will have more people doing more jobs, producing more and earning more, in the decade ahead. As I said before, to accomplish these goals business and labor must communicate with each other by realizing we want them both to succeed. Universities and vocational schools must educate and train the leaders and producers and keep those people in Indiana for this economic resurgence to take place. Business must continue to be creative and the public leaders must continue to provide a clear agenda for action and be willing to state policy and to take risks. And notice, I said public officials as well as private business is supposed to be willing to take those risks.

What I'm saying to all of you is what I have been saying to people across this country, "Don't paint Indiana with the same brush that many would use to paint other states in the Midwest region of the United States. I believe Indiana is one of the major hopes for the heartland.